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| APPLICATION NO. | PLICATION NO. FILING DATE FIRST NAMED INVENTOR | | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|--|----------------------------|-------------------------|------------------|
| 09/461,521 12/14/1999 REINHARD HEINRICH | | REINHARD HEINRICH HOHENSEE | BO9-99-013 | 3912 |
| 75 | . 04/10/2003 | | | |
| | L & PATTERSON, I | EXAMINER | | |
| P.O. BOX 969 | AL PROPERTY LAW | BIENEMAN, CHARLES A | | |
| AUSTIN,, TX | 78767-0969 | ART UNIT | PAPER NUMBER | |
| | | | 2176 | |
| | | | DATE MAILED: 04/10/2003 | 3 |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application N . Applicant(s) | | | | | |
|---|---|--|--|--|--|--|
| | 09/461,521 | HOHENSEE ET AL. | | | | |
| Offic Acti n Summary | Examiner | Art Unit | | | | |
| | Charles A. Bieneman | 2176 | | | | |
| The MAILING DATE of this c mmunication app P ri d f r Reply | pears on the cover sheet with the c | orrespondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a repl - If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status | 36(a). In no event, however, may a reply be time y within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from the application to become ABANDONE. | nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133). | | | | |
| 1) Responsive to communication(s) filed on 14 l | December 1999 and 15 February | 2000 | | | | |
| , — | is action is non-final. | | | | | |
| ·— | • | rosecution as to the merits is | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disp sition of Claims | | | | | | |
| 4)⊠ Claim(s) <u>1-15</u> is/are pending in the application | 1. | | | | | |
| 4a) Of the above claim(s) is/are withdra | wn from consideration. | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1-15</u> is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/or election requirement. Application Papers | | | | | | |
| 9) The specification is objected to by the Examine | er. | | | | | |
| 10)⊠ The drawing(s) filed on 14 December 1999 is/a | re: a)□ accepted or b)⊠ objected t | to by the Examiner. | | | | |
| Applicant may not request that any objection to th | e drawing(s) be held in abeyance. S | ee 37 CFR 1.85(a). | | | | |
| 11) The proposed drawing correction filed on | _ is: a) ☐ approved b) ☐ disappro | oved by the Examiner. | | | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | | | |
| 12) The oath or declaration is objected to by the Examiner. | | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | | |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). | | | | | | |
| a) The translation of the foreign language provisional application has been received. | | | | | | |
| 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) | | | | | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 | 5) Notice of Informal I | (PTO-413) Paper No(s) Patent Application (PTO-152) | | | | |

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DETAILED ACTION

1. This action is responsive to the following communications: original application filed on December 14, 1999 and Information Disclosure Statement filed February 15, 2000.

2. Claims 1-15 are pending. Claims 1, 6, and 11 are independent claims.

Claim Objections

- 3. Claims 2, 7, and 12 are objected to because of the following informalities: the word "type" in the phrase "determining type" should be preceded by an article; the examiner assumes for purposes of this Office action that applicants intended to recite "determining a type" in these claims. Appropriate correction is required.
- 4. Claims 4 and 9 are objected to because of the following informalities: a period is missing at the end of each of these claims. Appropriate correction is required.

Claim Rejections - 35 USC § 112

- 5. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 6. Claims 3, 8, and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The terms "less" and "more" in claims 3, 8, and 18 are relative terms which renders the claim indefinite. The terms "less" and "more" are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

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Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 9. Claims 1-2, 4-7, 9-12, and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 6,336,124 B1 to Alam et al., issued January 1, 2002, filed July 7, 1999 in view of U.S. Patent Number 5,813,020 to Hohensee et al., issued September 22, 1998.

Regarding independent claims 1, 6, and 11, Alam et al. teach a data processing system having a CPU, memory, at least one user output device, and a user input device. (Alam et al., Fig. 2.)

Further, Alam et al. teach a method for retrieving and presenting stored documents on a plurality of output devices each requiring different presentation parameters. (Alam et al., Abstract.)

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Further, Alam et al. teach parsing a document into one or more objects. (Alam et al., col. 6, lines 16-18: "Text/image document 518 is output to a document converter 528 which converts text and/or image document 518 to an intermediate format document 530."; col. 6, lines 59-61: "Each group is stored in the intermediate format document as an intermediate format block.")

Further, Alam et al. do not teach parsing each object into one or more units. However, Hohensee et al. teach parsing an object into one or more units when the object is a page segment. (Hohensee et al., Fig. 3.) Moreover, one of ordinary skill in the art would have recognized the need to parse an object into one or more units because one of ordinary skill would have known that objects such as pages are frequently comprised one or more units. Therefore, it would have been obvious to one of ordinary skill in the art to parse each object into one or more units.

Further, Alam et al. teach storing intermediate format blocks, analogous to units, according to their processing requirements. (Alam et al., col. 6, line 59 – col. 7, line 1.)

Further, Alam et al. inherently teach classifying connected presentation devices inasmuch as they teach that devices can access an index document that will allow them to select an output format suitable for the device (Alam et al., col. 21, lines 54-57); such a selection would not be possible unless devices were classified.

Further, Alam et al. teach receiving a request from a presentation device. (Alam et al., col. 22, lines 34-35.)

Further, Alam et al. teach assembling a document from stored intermediate format blocks, analogous to stored units. (Alam et al., col. 20, lines 25-29.)

Further, Alam et al. teach sending the assembled document to the presentation device. (Alam et al., col. 20, lines 49-51.)

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Regarding **dependent claims 2, 7, and 12**, Alam et al. teach determining a type of each unit inasmuch as determining a type of intermediate format block, analogous to units, is inherent in Alam et al.'s teaching of keeping track of and storing different kinds of intermediate format blocks, such as text, images, and multimedia files. (Alam et al., col. 6, line 57 – col. 7, line 1.)

Regarding **dependent claims 4, 9, and 14**, Alam et al. teach determining acceptable document formats for the connected presentation devices inasmuch as such a determination would have been inherent in sending an output format "depending upon the requesting application or output display device" (Alam et al., col. 20, lines 59-60), as well as the execution of JavaScript to select a suitable output format for the device (Alam et al., col. 21, lines 54-57); *i.e.*, before a selection of a suitable output format could be made, it would have been necessary to determine what formats were acceptable.

Further, Alam et al. do not explicitly teach classifying devices according to devicedependent characteristics. However, one of ordinary skill in the art would have known that it
was most efficient to classify devices according to device-dependent characteristics because one
of ordinary skill would have recognized that classifying devices according to device-dependent
characteristics would have resulted in the minimum number of classifications possible, and that
devices with different characteristics could be classified together as long as the different
characteristics were not device-dependent. Therefore, it would have been obvious to one of
ordinary skill in the art to classify devices according to device-dependent characteristics.

Regarding dependent claims 5, 10, and 15, Alam et al. do not teach determining whether the peripheral device is known or unknown. However, inasmuch as Alam et al. teach sending an output format "depending upon the requesting application or output display device"

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(Alam et al., col. 20, lines 59-60), one of ordinary skill in the art would have recognized that it would have been necessary to determine whether the peripheral device was known or unknown before selecting an output to be sent to it, because one of ordinary skill would have seen that it would not have been possible to send device-dependent output to an unknown device.

Therefore, it would have been obvious to one of ordinary skill in the art to implement the recited claim limitation.

10. Claims 3, 8, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alam et al. and Hohensee et al. in view of U.S. Patent Number 5,767,833 to Vanderwiele et al., issued June 16, 1998, cited in applicants Information Disclosure Statement filed February 15, 2000.

Alam et al. does not teach storing units, requiring less processing to convert to device-dependent format, in device-independent format or storing units, requiring more processing to convert to device-dependent format, in device-dependent format. However, Vanderwiele et al. teach a system that "determines whether [an] image is targeted for multiple hardware formats or a single hardware format and then provides a conversion from device independent bits to device dependent bits formats in the case of the multiple hardware format targeting, or performing image conversion appropriate for the single device in the case of the single device targeting." (Vanderwiele et al., Abstract.) Moreover, one of ordinary skill in the art would have recognized the benefit of storing units in device independent format requiring less process where possible, since one of ordinary skill would have recognized that less processing is desirable. One of ordinary skill in the art would also have recognized the desirability of storing units in device-dependent format requiring more processing when the target device was known to be a particular class of device, since this would deliver data to the device more quickly. Therefore, it would

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have been obvious to one of ordinary skill in the art to have implemented the steps of storing units, requiring less processing to convert to device-dependent format, in device-independent format or storing units, requiring more processing to convert to device-dependent format, in device-dependent format.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

| Number | Name | Issue Date | File Date | | |
|--------------|-----------------------------|---------------|-----------|-------------------|--|
| US 6,119,137 | Smith et al. | 9/12/00 | 1/30/97 | | |
| US 5,713,032 | Spencer | 1/27/98 | n/a | | |
| US 5,564,109 | Snyder et al. | | | | |
| WO 97/34240 | University of Massachusetts | | | Published 9/18/97 | |

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles A. Bieneman whose telephone number is 703-305-8045. The examiner can normally be reached on Monday - Thursday, 7:00 a.m. - 5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached on 703-308-5186. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

CAB April 2, 2003 HEATHER R. HERNDON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100